

# EQUALITY IMPACT ASSESSMENT AND ANALYSIS

## STREET LIGHTING POLICY

### INTRODUCTION

In August 2012, the council produced a draft revised Street Lighting Policy. This Policy has been developed to:-

1. Provide a framework for the delivery of street lighting that realises the vision of the emerging core strategy and supports the aims and objectives of the Council in a managed way.
2. Provide direction and an integrated approach for the maintenance and development requirements of street lighting.
3. Seek to reduce the Council's impact on climate change to deliver the benefits of appropriate street lighting.
4. Provide flexibility to evaluate new technology and implement where deemed appropriate

The core purpose of the Street Lighting function is to provide and manage an effective, efficient and sustainable Street Lighting Design, Maintenance and Installation service.

In respect of the Function, the main activities include:-

- Maintaining Street Lighting, Traffic Signs and Illuminated Bollards in a safe and operational condition in an effective and efficient manner.
- Taking a proactive stance on customer requirements and satisfaction.
- Taking a pro-active stance on environmental issues such as the disposal of electrical waste and providing efficient and effective lighting provision.
- Implementing the use of non-illuminated bollards and signs.
- Producing Maintenance and Developers Specifications to support the Policy and Corporate objectives.
- Monitoring and evaluating stock condition, completing programmed works for capital replacements and projects within agreed timescales whilst meeting financial deadlines.
- Continuing to competitively purchase energy from environmentally friendly sources.

There are also standards in place which the Function meets as follows:-

- Carry out bi-annual inspections of all circa 34,500 streetlights and electrical units.
- Replace 25% of the lamp stock per annum as part of a bulk lamp change programme.
- Test the council's highway electrical network on an eight yearly basis.
- Respond to street lighting faults with an aim to treat within 5 working days.
- Ensure that at least 99% of streetlights are working as planned at prescribed times.

Through the Street Lighting Policy, the council aims to manage energy consumption more efficiently and effectively, manage carbon emissions more efficiently and effectively and control light pollution. The Council is committed to providing a sustainable environment for the residents of South Gloucestershire and aims to use only green energy for street lighting supplies. Supply companies trade in both brown and green energy supplies. The brown energy is electricity generated using non-renewable carbon fuels, for example, gas, coal and oil. This energy is subject to the Climate Change Levy tax used by Central Government to promote development of alternative fuel sources. Green energy is derived from renewable sources, for example wind.

The following table shows the broad areas covered by the policy:-

<p><b>Legislation</b></p>	<p>There is no statutory requirement on local authorities in the UK to provide public lighting.</p> <p>Under the Highways Act 1980, Health and Safety at Work Act 1974 and Electricity at Work Regulations 1989 the Council has a duty to maintain its assets in a safe condition.</p> <p>Having provided Street Lighting, illuminated signage and bollards, the council has a duty of care to users of the highway network including other land that is owned and maintained by the council. It is therefore necessary to have full set of processes and procedures in place that allow for an effective and sustainable management and maintenance regime.</p> <p>The council is required by law to provide specific traffic signs and bollards in accordance with the Traffic Signs and General Directions - the Council has a duty to maintain these where provided.</p> <p>The Council has a statutory duty to promote road safety. Section 39 of the Road Traffic Act 1988 places statutory duties on the council to promote road safety. Under this Act, the council must: prepare and carry out measures designed to promote road safety; and, carry out studies into accidents arising out of these accidents arising out of the use of these vehicles on roads within its area. Street Lighting can be used to mitigate against accident black spots where it is deemed appropriate and able to influence road users. Generally this involves the implementation of casualty reduction schemes.</p>
<p><b>Environmental Impact</b></p>	<p>The Council is committed to providing a sustainable environment for the residents in South Gloucestershire. Street Lighting must therefore consider:- All council policies and strategies where relevant i.e. Emerging Carbon Reduction Strategy.</p> <p>Ensure all new and replacement Street Lighting is: -</p> <ul style="list-style-type: none"> <li>- Sustainable</li> <li>- Proven to be energy efficient and effective</li> <li>- Considers British and European Standards</li> <li>- Designed and manufactured to a high quality</li> </ul> <p>The recycling of all waste to: -</p> <ul style="list-style-type: none"> <li>- Minimise landfill requirements</li> <li>- Ensure that the obligations under the W.E.E.E. directive (Waste Electrical and Electronic Equipment Directive)</li> </ul> <p>Minimize the requirement for new equipment by: -</p> <ul style="list-style-type: none"> <li>- Re-using materials where possible e.g. sign faces and photo cells</li> </ul> <p>When assessing replacement lighting schemes consider:</p> <ul style="list-style-type: none"> <li>- Appropriateness, thus avoiding the installation of unnecessary lighting wherever possible.</li> <li>- Environmental issues such as light spillage and intrusion.</li> <li>- Impact on wildlife</li> </ul> <p>South Gloucestershire Council aims to be consistent with the requirements of the NERC Act 2006 (Natural Environment and Rural Communities Act 2006)</p>
<p><b>Maintenance Requirements</b></p>	<p>Under legislation, the council has a duty to maintain its assets in a safe condition. It is therefore necessary to have full set of processes and procedures that allow for an effective and sustainable maintenance regime.</p>

<b>Design</b>	A design team is in place to ascertain appropriate levels of lighting during maintenance or replacement work. The objective is to provide appropriate lighting that considers whole-life costing, carbon and energy reduction.
<b>Replacement works</b>	Replacement works are prioritised and planned and links with design criteria to fulfil the aims and objectives for whole-life costing, carbon and energy reduction.
<b>Added Value</b>	All services and works aim to provide added value. This is to ensure that all design, maintenance, and environmental impacts are considered, in order to consider current standards and specification as well as minimise future maintenance costs and meet with the council's aims and objectives.
<b>Light Sources</b>	Over the last 30 - 40 years, lighting has traditionally been provided by low pressure (SOX) and high pressure sodium (SON) lamps. However, technology is continually being developed and the council will use the most efficient method of illumination and lighting stock management available e.g. LED.
<b>Hours of Illumination</b>	<p>The primary requirement for street lighting is to provide a sustainable and appropriate level of lighting to the road network. Inappropriate lighting contributes to the excessive energy consumption, CO2 production and can cause light pollution.</p> <p><u>Part Night Lighting</u> The standard hours of illumination for street lighting set out in the Policy will be midnight until 4.15am (+/- 15 minutes) GMT. During British Summer Time (BST) the street lights will turn off at 1am (+/- 15mins) and turn back on at 05.15am (+/- 15mins) if it is still dark. There are exceptions to this where it is deemed all night lighting will:-</p> <ul style="list-style-type: none"> <li>- Mitigate night-time crime or anti-social behaviour where street lighting is considered essential.</li> <li>- Maintain road safety where street lighting is considered essential.</li> </ul> <p><u>Dimming</u> To make further financial savings and further reduce carbon footprint, the council will in addition to part night lighting and where technologically feasible, lower existing lighting levels through appropriate design and application of a dimming regime.</p> <p><u>Sign Lighting</u> The Council will de-illuminate signs and bollards where it is deemed appropriate.</p> <p><u>Localism</u> To allow Parish and Town Councils to assess local priorities, the council will consider a request from a Parish or Town Council to maintain all night lighting in a specified area: provided there is sustainable funding available from the Parish or Town Council to do so.</p>
<b>Future Strategy</b>	Looking forward, the council will continue to reduce energy and CO2 emissions whilst providing an appropriate level of lighting. The council will monitor technological developments and innovation and evaluate these accordingly.

## Further Details Relating to Hours of Illumination

The following information confirms the criteria which the Policy would use for part-night-lighting:-

### All street lighting will be part-nighted except where the following is applicable:-

- Where is it deemed to
  - Assist in the mitigation of night-time crime or anti-social behaviour.
  - Improve road safety and reduce accidents.
- In areas with CCTV and/or local authority/police surveillance equipment reliant on street lighting.
- Areas with 24hr operational emergency services sites including hospitals.
- Formal pedestrian crossings and controlled junctions (Zebra, pelican etc.).
- Areas with South Gloucestershire Council designated sheltered housing.
- On bends with a radius of less than value below, and/or approach distances to roundabouts and major junctions set out below:

Road Speed Mph	30	40	50	60	70
Minimum lighting distance to Roundabout or Junction	70m	120m	160m	215m	295m
Minimum radius	180m	360m	510m	720m	1020m

Any other concerns that are identified through discussion with the Parish or Town Council and/or local interest groups, the Police, and teams within the council will be considered on their respective merits and in accordance with Policy.

The final decision rests with the council on the decision to part-night. However, to allow Parish and Town Councils to assess local priorities, the Council will consider a request from a Parish or Town Council to maintain all-night-lighting in a specified area: provided there is sustainable funding available from the Parish or Town Council to do so.

## RESEARCH AND CONSULTATION CONDUCTED

This EqIAA has considered the requirements of The Equality Act 2010, including the Public Sector Equality Duty, and has conducted an analysis of the policy. In respect of all of the following areas, this EqIAA has concluded that there are no issues emerging that would disproportionately disadvantage any particular protected characteristic group.

- Legislation
- Environmental Impact
- Maintenance Requirements
- Design
- Replacement works
- Added Value
- Light Sources
- Future Strategy

The following provides explanation concerning the reasons for this conclusion:-

<b>Legislation</b>	The council clearly intends to continue to comply with all legal requirements and statutory codes. This results in no change and consequently no change to the way in which any protected characteristic group experiences the council's compliance with legal requirements.
<b>Environmental Impact</b>	The council is committed to providing a sustainable environment for the residents in South Gloucestershire. This commitment has been historical and seeks to benefit all residents. No particular protected characteristic groups experience environmental impacts in relation to street lighting differentially.
<b>Maintenance Requirements</b>	The council has in place a full set of processes and procedures that allow for an effective and sustainable maintenance regime. This regime benefits all residents. Therefore, no protected characteristic groups experience the council's approach to the maintenance of street lighting differentially.
<b>Design</b>	A design team is in place to ascertain appropriate levels of lighting during maintenance or replacement work. This regime benefits all residents. Therefore, no protected characteristic groups experience the council's approach to design in relation to street lighting differentially.
<b>Replacement works</b>	Replacement works are prioritised and planned and benefit all residents. Therefore, no protected characteristic groups experience the council's approach to replacement works in relation to street lighting differentially.
<b>Added Value</b>	Added value is about ensuring that design, maintenance, and environmental impacts are considered, in order to consider current standards and specification as well as minimise future maintenance costs. This benefits all residents. Therefore, no protected characteristic groups experience the council's approach to replacement works in relation to street lighting differentially.
<b>Light Sources</b>	The council is committed to using the most efficient method of illumination and lighting stock management available. This benefits all residents. Therefore, no protected characteristic groups experience the council's approach to light sources in relation to street lighting differentially.
<b>Future Strategy</b>	The council is committed to continuing to reduce energy and CO2 emissions and will monitor technological developments and innovation and evaluate these accordingly. This benefits all residents. Therefore, no protected characteristic groups experience the council's approach to future strategy in relation to street lighting differentially.

## Hours of Illumination

With respect to the area of “**Hours of Illumination**” there is potential for some groups, based on their protected characteristics, to experience the impact of part-night-lighting and dimming differentially and the following pages of this EqlAA discuss these impacts.

Part-night-lighting and dimming have already been the subject of trials and this has allowed for consultation to be conducted, feedback to be gained from a wide range of residents and groups including Town and Parish Councils. This feedback has been analysed and the broad issues emerging which have the potential to impact upon different protected characteristic groups differentially are:-

1. Crime and anti-social behaviour including fear of crime and anti-social behaviour and the likelihood of going out at night.
2. Night time road accidents.
3. Trip, slip and fall accidents.

Specific research has also been conducted via the Streetcare Annual Survey 2011/12 which gauged perceptions in respect of importance as well as satisfaction levels in respect of all Streetcare activity, including street lighting trials. The following tables show the feedback gained via the survey:-

*Table 1: Table to show responses to the question “How important are the following services to you?” (2011/12 survey)*

Service	Importance
1. Helpful and efficient staff	97.80%
2. A prompt response to your call, e-mail or letter	97.10%
3. Provision of litter bins	97.00%
4. Prompt repairs to potholes and other defects	96.90%
5. Keeping town centres clear of litter and weeds	96.90%
6. A prompt resolution of your issue	96.80%
7. Frequency of litter bin emptying	96.40%
8. Enforcement of litter, dog fouling and fly tipping offences	96.30%
9. Keeping roads, footpaths and parks clear of litter & weeds	96.00%
10. Responding to fly tipping incidents	96.00%
11. Keeping you informed about the progress of your issue	95.80%
12. Prompt gritting of main roads	95.70%
13. Keeping public parks and open spaces clear from dog fouling	95.60%
14. Maintaining existing streetlights in good condition	95.60%
15. Accessible and relevant information about our services	95.60%
16. Snow clearing of main roads	95.50%
17. Maintaining road surface in good condition	95.40%
18. Repairing broken streetlights	95.40%
19. Clearing blocked drains	95.30%
20. High standard of reinstatement after road repairs/other works	94.80%
21. Ensuring the health & safety of the public and our staff	94.40%
22. Frequency of dog bin emptying	94.30%
23. Removal of abandoned cars	93.80%
24. Provision of dog bins	93.40%
25. Maintaining footpaths in good condition	92.70%
26. Minimising the impact of our services on the environment	92.70%

27. The Streetcare helpdesk	92.00%
28. Maintenance of public grass areas / shrub beds	91.60%
29. Litter education and prevention programme	90.80%
30. Minimising disruption and delays caused by road works	90.60%
31. Snow clearing of footpaths and cycleways in town centres	90.60%
32. Provision of public parks	90.10%
33. Ensuring that dogs are kept under control in parks	89.20%
34. Giving the public prior warning of major road works	87.80%
35. Provision of street lighting trials e.g. switch off/dimming	87.20%
36. Maintenance of children's play areas	86.60%
37. Maintenance of bus shelters	86.50%
38. Provision of grit bins in local areas	86.40%
39. Provision of traffic signs and road markings	85.70%
40. Maintenance of outdoor pitches / playing fields	84.50%
41. Provision of public toilets	84.10%
42. Provision of children's play areas	82.20%
43. Provision of outdoor sports pitches / playing fields	80.80%
44. Provision of street furniture ( e.g. bollards, name plates, seats)	79.80%
45. Provision of cemeteries	79.70%
46. Provision of flower beds / floral displays in public areas	71.70%
47. Provision of allotments	67.70%

Table 2: Table to show responses to the question "How well do you think we do the following?"

Service	Satisfaction
1. Maintaining existing streetlights in good condition	90.50%
2. Repairing broken streetlights	86.80%
3. Helpful and efficient staff	81.00%
4. Prompt gritting of main roads	79.40%
5. The Streetcare helpdesk	78.60%
6. Provision of public parks	75.60%
7. Providing a prompt response to your call, e-mail or letter	74.60%
8. Provision of outdoor sports pitches / playing fields	73.70%
9. Provision of children's play areas	73.60%
10. Provision of flower beds / floral displays in public areas	72.70%
11. Snow clearing of main roads	72.30%
12. Accessibility and relevance of information about our services	71.40%
13. Maintenance of public grass areas / shrub beds	71.10%
14. Giving the public prior warning of major road works	70.30%
15. Ensuring the health & safety of the public and our staff	69.60%
16. Provision of traffic signs and road markings	68.80%
17. Maintenance of children's play areas	68.40%
18. Maintenance of outdoor pitches / playing fields	68.40%
19. Keeping town centres clear of litter and weeds	67.70%
20. Provision of litter bins	67.50%
21. Maintenance of bus shelters	67.00%
22. Provision of street furniture ( e.g. bollards, name plates, seats)	65.20%

23. Minimising the impact of our services on the environment	64.80%
24. Minimising disruption and delays caused by road works	63.90%
25. Frequency of litter bin emptying	63.60%
26. Provision of dog bins	61.60%
27. Keeping roads, footpaths and parks clear of litter & weeds	61.40%
28. Provision of cemeteries	61.00%
29. A prompt resolution to your issue	60.50%
30. High standard of reinstatement after road repairs/other works	56.60%
31. Keeping you informed about the progress of your issue	55.70%
32. Frequency of dog bin emptying	53.90%
33. Provision of grit bins in local areas	52.60%
<b>34. Provision of street lighting trials e.g. switch off/dimming</b>	<b>52.20%</b>
35. Responding to fly tipping incidents	49.90%
36. Ensuring that dogs are kept under control in parks	49.50%
37. Maintaining footpaths in good condition	49.30%
38. Removal of abandoned cars	49.30%
39. Clearing blocked drains	49.00%
40. Keeping public parks and open spaces clear from dog fouling	47.70%
41. Provision of public toilets	44.90%
42. Provision of allotments	44.10%
43. Snow clearing of footpaths and cycleways in town centres	43.10%
44. Maintaining road surface in good condition	42.80%
45. Litter education and prevention programme	38.70%
46. Prompt repairs to potholes and other defects	37.50%
47. Enforcement of litter, dog fouling and fly tipping offences	31.40%

Table 3: Table to show responses to the question "How important are the following services to you?" as disaggregated by protected characteristic groupings. (2011/12 Survey)

Importance of service	Overall	Male	Female	Under 25	Over 65	Disabled	Non disabled	White British	Non White British
Provision of street lighting trials e.g. switch off/dimming	<b>87.20%</b>	83.10%	92.00%	99.90%	81.30%	86.70%	87.30%	87.10%	91.20%

The 2012/13 Streetcare survey found the following in relation to feedback gained on the subject of streetlighting:

Table 4: Table to show responses to the Streetcare survey 2012/13

Importance of service	Overall	Male	Female	Under 25	26 to 65	Over 65	Disabled	Non Disabled	White British	Non White British
Overall streetlighting service	<b>64%</b>	61%	67%	86%	62%	70%	65%	64%	65%	65%

In comparison to 2011/12, the importance of streetlighting appears to have reduced. However, for those under 25 years and those over 65 years, the importance of streetlighting remains significantly higher when compared to other groups.

Table 5: Table to show responses to the question “How well do you think we do the following?” as disaggregated by protected characteristic groupings. (2011/12 Survey)

Satisfaction with service	Overall	Male	Female	Under 25	Over 65	Disabled	Non disabled	White British	Non White British
Provision of street lighting trials e.g. switch off/dimming	<b>52.20%</b>	45.40 %	60.80%	55.50%	58.30%	50.80%	52.60%	53.80%	43.10%

Table 6: Table to show responses to the Streetcare survey 2012/13

Service Satisfaction	Overall	Male	Female	Under 25	26 to 65	Over 65	Disabled	Non Disabled	White British	Non White British
Overall streetlighting service	<b>54%</b>	54%	55%	50%	53%	58%	50%	56%	56%	40%

In comparison to 2011/12, satisfaction levels remain broadly similar in 2012/13

The data shows the following:-

- In 2011/12, the importance of street lighting trials e.g. switch off/dimming, ranked 35<sup>th</sup> out of 47 services surveyed which are provided by the Streetcare service. Street lighting trials e.g. switch off/dimming, received an importance rating of 87.20%.
- Maintaining existing streetlights in good condition and repairing broken streetlights were both areas of high importance to people. Indeed, both of these areas received the highest level of satisfaction by respondents when compared to the services delivered by the wider Streetcare service in 2011/12.
- In 2011/12, respondents were less satisfied with the provision of street lighting trials e.g. switch off/dimming (52.20% satisfaction rating).
- In 2011/12, the groups feeding back the highest level of importance were Under 25's and Females and Non-White British. In 2012/13, the groups feeding back the highest level of importance were those under 25 years and those over 65 years.
- The groups with the least satisfaction in 2012/13 were those aged under 25, Disabled People and Non White British people.

## IDENTIFICATION AND ANALYSIS OF EQUALITIES ISSUES AND IMPACTS

As previously stated, the particular issues associated with hours of illumination are:-

- Crime and anti-social behaviour including fear of crime and anti-social behaviour and the likelihood of going out at night.
- Night time road accidents.
- Trip, slip and fall accidents.

The following table provides an assessment of impact with respect to protected characteristic groups:-

Group	Issue(s) Raised	Response
<p><b>Age (older people)</b></p>	<p>Older people may feel more vulnerable to crime as a result of reduced lighting, but much depends on the specific circumstances as well as other factors such as crime rates, policing and quality of public spaces. The extent to which street lighting is the main factor is unclear and depends on the person and local factors.</p> <p>Older people may feel more concerned that anti-social behaviour will increase.</p> <p>There is potential impact by indirectly restricting social activities during the hours that lights are switched off. This may occur because of fears about community safety or road safety and also because of fears about trips and falls during the hours that lights are switched off.</p> <p>Part-night-switching of street lighting is nothing new and was in fact commonplace in the 1960's and 1970's. The first electrified street lighting was controlled by time clocks which required manual resetting twice each year. As the number of street lights increased, this impacted upon the time involved to reset the clocks. As the cost of electricity was comparatively low, these clocks were replaced by light sensors on individual lights. Technology has now</p>	<p>Older people are proportionately less likely to be outside the home after midnight (or after 1a.m. during BST) and are therefore less likely to be impacted by changes to street lighting policy.</p> <p>In the 2011/12 Streetcare Survey, older people saw the street lighting trials as less important to them than any other group and had a higher satisfaction level with the trials (58.30% compared to the average satisfaction level of all groups combined of 52.20%).</p> <p>The impact on community safety has two core dimensions: the impact on prevented crime and the impact on fear of crime. A joint statement issued by the Police and the council states: <i>Police and the Council have been monitoring the impact of part night lighting on crime as it has been rolled out in towns and villages across South Gloucestershire.</i></p> <p><i>The findings mirror the national picture, which is that part night lighting has so far not had any notable adverse impact on crime.</i></p> <p><i>We will not be complacent and will continue to monitor incidents to ensure South Gloucestershire remains a safe place to live and work.</i></p>

	<p>developed light sensors which operate using electronic components and which allow part-night-lighting to be introduced. Whilst crime and disorder figures are available for the 1960's and 1970's, the way in which data is recorded has changed significantly over this time making it difficult for direct comparisons to be made to assess if all-night-lighting contributed to a reduction in crime and disorder figures. Additionally, people lived in a different way during the 60's and 70's with fewer people travelling long distances to work and also living within extended family groups and close knit communities.</p>	<p>The Department for Transport (DfT) commissioned a review in 2009 of the methodology for quantifying the benefits of improved street lighting schemes (Maintenance of Street Lights and Roads (MOSLAR) Guidance Note: Street Lights). The review concluded that there is no clear evidence that the provision of street lighting reduces incidence of crime, and only moderate evidence demonstrating a reduction in fear of crime.</p> <p>Another consideration is whether the impact on fear of crime is a sustained impact. It is possible that residents may have initial concerns but these may subside as they become used to the changes in street lighting.</p> <p>Street lighting will not be part-nighted where it is deemed to assist in the mitigation of night-time crime or anti-social behavior, where there are formal pedestrian crossings and controlled junctions (Zebra, pelican etc.), nor in areas with South Gloucestershire Council designated sheltered housing.</p> <p>It is worth noting that several authorities have provided information regarding dimming trials which have shown that dimming of 25% can be imperceptible to the human eye.</p>
<p><b>Age (younger people)</b></p>	<p>In the 2011/12 Streetcare Survey, younger people saw the street lighting trials as highly important to them (99.90%).</p> <p>Similarly to older people, there is a concern that crime and anti-social behaviour will increase.</p> <p>Younger adults are more likely to frequent pubs and clubs and therefore, be more likely to be impacted by part-night street lighting.</p> <p>Road safety is an issue relevant to all groups, however, has been raised under this heading because older children</p>	<p>Children are proportionately less likely to be outside the home after midnight (or after 1a.m. during BST) and are therefore less likely to be impacted by changes to street lighting. However, young adults are more likely to frequent pubs and clubs and therefore, be more likely to be impacted by part-night street lighting.</p> <p>The impact on community safety has two core dimensions: the impact on prevented crime and the impact on fear of crime. A joint statement issued by the Police and the council states: <i>Police and the Council have been monitoring the impact of part night lighting on crime as it</i></p>

	<p>and young adults are seen as key groups for reducing road traffic casualties. Accident rates are higher during the hours of darkness.</p>	<p><i>has been rolled out in towns and villages across South Gloucestershire.</i></p> <p><i>The findings mirror the national picture, which is that part night lighting has so far not had any notable adverse impact on crime.</i></p> <p><i>We will not be complacent and will continue to monitor incidents to ensure South Gloucestershire remains a safe place to live and work.</i></p> <p>The Department for Transport (DfT) commissioned a review in 2009 of the methodology for quantifying the benefits of improved street lighting schemes (Maintenance of Street Lights and Roads (MOSLAR) Guidance Note: Street Lights). The review concluded that there is no clear evidence that the provision of street lighting reduces incidence of crime, and only moderate evidence demonstrating a reduction in fear of crime.</p> <p>Another consideration is whether the impact on fear of crime is a sustained impact. It is possible that residents may have initial concerns but these may subside as they become used to the changes in street lighting.</p> <p>Street lighting will not be part-nighted where it is deemed to assist in the mitigation of night-time crime or anti-social behavior, where it is deemed to improve road safety and reduce accidents, where there are formal pedestrian crossings and controlled junctions (Zebra, pelican etc.), nor in areas with CCTV local authority/police surveillance equipment reliant on street lighting.</p> <p>Street lighting has long been associated with benefits to reducing accidents by improving drivers' ability to see potential hazards. The DfT report "Maintenance of Street Lights and Roads (MOSLAR) Guidance Note: Street Lights (2009) concluded that in the past it has been widely assumed that street lighting reduces accidents by 30% but cited more recent research that suggests a more moderate</p>
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		<p>reduction of 10% for dual carriageways and 12.5% for single carriageways. One of the reasons for this is that even though the risk of accidents occurring is higher during the hours of darkness, it is difficult to quantify the direct impact of street lighting separate from other night-time factors such as fatigue and drink driving. Further investigation of each crash is needed to draw conclusions about the impacts of the new street lighting policy on road safety. However, the policy is clear that street lighting will be provided at bends, roundabouts and major junctions.</p> <p>It is worth noting that several authorities have provided information regarding dimming trials which have shown that dimming of 25% can be imperceptible to the human eye.</p>
<p><b>Disability</b></p>	<p>People with visual or mobility impairments may find street lighting helpful in assisting them to navigate and avoid hazards, as such, there is a potential impact on risk of falling and accessibility.</p> <p>People with disabilities may feel more vulnerable to crime as a result of reducing lighting, but much depends on the specific circumstances as well as other factors such as crime rates, policing and quality of public spaces.</p> <p>There may be potential for an increase in ‘hate crime’ against people with physical or learning disabilities.</p> <p>Carers may have concern at lower levels of lighting when attending a relative or service user late at night/early in the morning.</p>	<p>In the 2011/12 Streetcare Survey, Disabled People reported a slightly lower satisfaction level with the street lighting trials (50.80% compared to the average satisfaction level of all groups combined of 52.20%).</p> <p>The impact on community safety has two core dimensions: the impact on prevented crime and the impact on fear of crime. A joint statement issued by the Police and the council states: <i>Police and the Council have been monitoring the impact of part night lighting on crime as it has been rolled out in towns and villages across South Gloucestershire. The findings mirror the national picture, which is that part night lighting has so far not had any notable adverse impact on crime. We will not be complacent and will continue to monitor incidents to ensure South Gloucestershire remains a safe place to live and work.</i></p> <p>The Department for Transport (DfT) commissioned a review in 2009 of the methodology for quantifying the benefits of improved street lighting schemes (Maintenance</p>

		<p>of Street Lights and Roads (MOSLAR) Guidance Note: Street Lights). The review concluded that there is no clear evidence that the provision of street lighting reduces incidence of crime, and only moderate evidence demonstrating a reduction in fear of crime.</p> <p>Another consideration is whether the impact on fear of crime is a sustained impact. It is possible that residents may have initial concerns but these may subside as they become used to the changes in street lighting.</p> <p>Street lighting will not be part nighted where it is deemed to assist in the mitigation of night-time crime or anti-social behavior, where there are formal pedestrian crossings and controlled junctions (Zebra, pelican etc.), nor in areas with South Gloucestershire Council designated sheltered housing.</p> <p>It is worth noting that several authorities have provided information regarding dimming trials which have shown that dimming of 25% can be imperceptible to the human eye.</p>
<p><b>Race</b></p>	<p>Community safety is an important issue for all including people from minority ethnic backgrounds, with prevention of street crime and racially motivated crime being particularly relevant.</p>	<p>In the 2011/12 Streetcare Survey, people from BAME communities reported a slightly lower satisfaction level with the street lighting trials (43.10% compared to the average satisfaction level of all groups combined of 52.20%).</p> <p>The impact on community safety has two core dimensions: the impact on prevented crime and the impact on fear of crime. A joint statement issued by the Police and the council states: <i>Police and the Council have been monitoring the impact of part night lighting on crime as it has been rolled out in towns and villages across South Gloucestershire.</i></p> <p><i>The findings mirror the national picture, which is that part night lighting has so far not had any notable adverse impact on crime.</i></p>

		<p><i>We will not be complacent and will continue to monitor incidents to ensure South Gloucestershire remains a safe place to live and work.</i></p> <p>The Department for Transport (DfT) commissioned a review in 2009 of the methodology for quantifying the benefits of improved street lighting schemes (Maintenance of Street Lights and Roads (MOSLAR) Guidance Note: Street Lights). The review concluded that there is no clear evidence that the provision of street lighting reduces incidence of crime, and only moderate evidence demonstrating a reduction in fear of crime.</p> <p>Another consideration is whether the impact on fear of crime is a sustained impact. It is possible that residents may have initial concerns but these may subside as they become used to the changes in street lighting.</p> <p>Street lighting will not be part-nighted where it is deemed to assist in the mitigation of night-time crime or anti-social behavior.</p> <p>It is worth noting that several authorities have provided information regarding dimming trials which have shown that dimming of 25% can be imperceptible to the human eye.</p>
<p><b>Sex</b></p>	<p>Females may feel more vulnerable to crime as a result of reducing lighting, but much depends on the specific circumstances as well as other factors such as crime rates, policing and quality of public spaces.</p>	<p>In the 2011/12 Streetcare Survey, Females reported a higher satisfaction level with the street lighting trials (60.80% compared to the average satisfaction level of all groups combined of 52.20%).</p> <p>The impact on community safety has two core dimensions: the impact on prevented crime and the impact on fear of crime. A joint statement issued by the Police and the council states: <i>Police and the Council have been monitoring the impact of part night lighting on crime as it has been rolled out in towns and villages across South</i></p>

		<p><i>Gloucestershire.</i>  <i>The findings mirror the national picture, which is that part night lighting has so far not had any notable adverse impact on crime.</i>  <i>We will not be complacent and will continue to monitor incidents to ensure South Gloucestershire remains a safe place to live and work.</i></p> <p>The Department for Transport (DfT) commissioned a review in 2009 of the methodology for quantifying the benefits of improved street lighting schemes (Maintenance of Street Lights and Roads (MOSLAR) Guidance Note: Street Lights). The review concluded that there is no clear evidence that the provision of street lighting reduces incidence of crime, and only moderate evidence demonstrating a reduction in fear of crime.</p> <p>Another consideration is whether the impact on fear of crime is a sustained impact. It is possible that residents may have initial concerns but these may subside as they become used to the changes in street lighting.</p> <p>Street lighting will not be part-nighted where it is deemed to assist in the mitigation of night-time crime or anti-social behavior.</p> <p>It is worth noting that several authorities have provided information regarding dimming trials which have shown that dimming of 25% can be imperceptible to the human eye.</p>
<p><b>Sexual Orientation</b></p>	<p>Gay, Lesbian and Bisexual people may feel more vulnerable to crime as a result of reducing lighting, but much depends on the specific circumstances as well as other factors such as crime rates, policing and quality of public spaces.</p>	<p>The impact on community safety has two core dimensions: the impact on prevented crime and the impact on fear of crime. A joint statement issued by the Police and the council states: <i>Police and the Council have been monitoring the impact of part night lighting on crime as it has been rolled out in towns and villages across South Gloucestershire.</i></p>

		<p><i>The findings mirror the national picture, which is that part night lighting has so far not had any notable adverse impact on crime.</i></p> <p><i>We will not be complacent and will continue to monitor incidents to ensure South Gloucestershire remains a safe place to live and work.</i></p> <p>The Department for Transport (DfT) commissioned a review in 2009 of the methodology for quantifying the benefits of improved street lighting schemes (Maintenance of Street Lights and Roads (MOSLAR) Guidance Note: Street Lights). The review concluded that there is no clear evidence that the provision of street lighting reduces incidence of crime, and only moderate evidence demonstrating a reduction in fear of crime.</p> <p>Another consideration is whether the impact on fear of crime is a sustained impact. It is possible that residents may have initial concerns but these may subside as they become used to the changes in street lighting.</p> <p>Street lighting will not be part-nighted where it is deemed to assist in the mitigation of night-time crime or anti-social behavior.</p> <p>It is worth noting that several authorities have provided information regarding dimming trials which have shown that dimming of 25% can be imperceptible to the human eye.</p>
<p><b>Religion/Belief</b></p>	<p>People may feel more vulnerable to crime as a result of reducing lighting, and it is recognised that this is particularly relevant to faith communities who may be at risk of hate crime e.g. anti-Semitism, Islamophobia, but much depends on the specific circumstances as well as other factors such as crime rates, policing and quality of public spaces.</p>	<p>The impact on community safety has two core dimensions: the impact on prevented crime and the impact on fear of crime. A joint statement issued by the Police and the council states: <i>Police and the Council have been monitoring the impact of part night lighting on crime as it has been rolled out in towns and villages across South Gloucestershire.</i></p> <p><i>The findings mirror the national picture, which is that part</i></p>

		<p><i>night lighting has so far not had any notable adverse impact on crime.</i>  <i>We will not be complacent and will continue to monitor incidents to ensure South Gloucestershire remains a safe place to live and work.</i></p> <p>The Department for Transport (DfT) commissioned a review in 2009 of the methodology for quantifying the benefits of improved street lighting schemes (Maintenance of Street Lights and Roads (MOSLAR) Guidance Note: Street Lights). The review concluded that there is no clear evidence that the provision of street lighting reduces incidence of crime, and only moderate evidence demonstrating a reduction in fear of crime.</p> <p>Another consideration is whether the impact on fear of crime is a sustained impact. It is possible that residents may have initial concerns but these may subside as they become used to the changes in street lighting.</p> <p>Street lighting will not be part-nighted where it is deemed to assist in the mitigation of night-time crime or anti-social behavior.</p> <p>It is worth noting that several authorities have provided information regarding dimming trials which have shown that dimming of 25% can be imperceptible to the human eye.</p>
<p><b>Gender Reassignment</b></p>	<p>There may be a feeling of increased vulnerability to crime as a result of reducing lighting, but much depends on the specific circumstances as well as other factors such as crime rates, policing and quality of public spaces.</p>	<p>The impact on community safety has two core dimensions: the impact on prevented crime and the impact on fear of crime. A joint statement issued by the Police and the council states: <i>Police and the Council have been monitoring the impact of part night lighting on crime as it has been rolled out in towns and villages across South Gloucestershire.</i>  <i>The findings mirror the national picture, which is that part night lighting has so far not had any notable adverse</i></p>

		<p><i>impact on crime.</i>  <i>We will not be complacent and will continue to monitor incidents to ensure South Gloucestershire remains a safe place to live and work.</i></p> <p>The Department for Transport (DfT) commissioned a review in 2009 of the methodology for quantifying the benefits of improved street lighting schemes (Maintenance of Street Lights and Roads (MOSLAR) Guidance Note: Street Lights). The review concluded that there is no clear evidence that the provision of street lighting reduces incidence of crime, and only moderate evidence demonstrating a reduction in fear of crime.</p> <p>Another consideration is whether the impact on fear of crime is a sustained impact. It is possible that residents may have initial concerns but these may subside as they become used to the changes in street lighting.</p> <p>Street lighting will not be part-nighted where it is deemed to assist in the mitigation of night-time crime or anti-social behavior.</p> <p>It is worth noting that several authorities have provided information regarding dimming trials which have shown that dimming of 25% can be imperceptible to the human eye.</p>
<p><b>Pregnancy and Maternity</b></p>	<p>In addition to the potential to feel more vulnerable to crime as a result of reducing lighting, there is also an issue to be raised in relation to impact on travel to access maternity unit/hospital care.</p>	<p>The impact on community safety has two core dimensions: the impact on prevented crime and the impact on fear of crime. A joint statement issued by the Police and the council states: <i>Police and the Council have been monitoring the impact of part night lighting on crime as it has been rolled out in towns and villages across South Gloucestershire.</i></p> <p><i>The findings mirror the national picture, which is that part night lighting has so far not had any notable adverse impact on crime.</i></p>

		<p><i>We will not be complacent and will continue to monitor incidents to ensure South Gloucestershire remains a safe place to live and work.</i></p> <p>The Department for Transport (DfT) commissioned a review in 2009 of the methodology for quantifying the benefits of improved street lighting schemes (Maintenance of Street Lights and Roads (MOSLAR) Guidance Note: Street Lights). The review concluded that there is no clear evidence that the provision of street lighting reduces incidence of crime, and only moderate evidence demonstrating a reduction in fear of crime.</p> <p>Another consideration is whether the impact on fear of crime is a sustained impact. It is possible that residents may have initial concerns but these may subside as they become used to the changes in street lighting.</p> <p>Street lighting will not be part-nighted in areas with 24hr operational emergency services sites including hospitals.</p> <p>It is worth noting that several authorities have provided information regarding dimming trials which have shown that dimming of 25% can be imperceptible to the human eye.</p>
<p><b>Marriage and Civil Partnership</b></p>	<p>It is not considered that the protected characteristic of “Marriage and Civil Partnership” is relevant to the impacts in changes to the Street Lighting Policy.</p>	<p>N/A</p>

## **EqIAA OUTCOME**

The following provides an explanation of the outcomes of this EqIAA.

A central question to be addressed as part of the decision-making process is that of whether a decision to implement the policy would be lawful under equality-based legislation and allow South Gloucestershire Council to meet the requirements of Equality Act 2010 c. 15 Part 11 Chapter 1 Section 149, namely the duty to have due regard to the need to:

1. Eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by the Equality Act 2010.
2. Advance equality of opportunity between persons who share a protected characteristic and persons who do not share it.
3. Foster good relations between persons who share a protected characteristic and persons who do not share it.

All protected characteristic groups as identified by the Equality Act 2010, with the exception of Marriage and Civil Partnership, have been identified as being impacted by the Policy under consideration. The impacts identified fall under the following three broad areas:-

- Crime and anti-social behaviour including fear of crime and anti-social behaviour and the likelihood of going out at night
- Night time road accidents
- Trip, slip and fall accidents

### **Crime and anti-social behaviour including fear of crime and anti-social behaviour and the likelihood of going out at night**

With regard to crime and anti-social behaviour, a joint statement issued by the Police and the council states: *Police and the Council have been monitoring the impact of part night lighting on crime as it has been rolled out in towns and villages across South Gloucestershire. The findings mirror the national picture, which is that part night lighting has so far not had any notable adverse impact on crime. We will not be complacent and will continue to monitor incidents to ensure South Gloucestershire remains a safe place to live and work.* This information should contribute towards reducing the fear of crime. It is widely accepted that people fear crime more in darker areas because fewer people are around. This means that it is not street lighting per se that reduces fear of crime, but the presence of other people who are more likely to walk down a lit street than an unlit street. In streets where the pedestrian footfall is low to begin with, changes to street lighting may have less of an impact compared to streets where pedestrian footfall is high to begin with. Low footfall is more likely to be an issue in rural areas and in side streets and residential areas. Additionally, it is important to consider whether the impact on fear of crime is a sustained impact. It is possible that residents may have initial concerns but these may subside as they become used to changes in street lighting. The policy is also clear that street lighting will not be part-nighted where it is deemed to assist in the mitigation of night-time crime or anti-social behavior, nor in areas with CCTV local authority/police surveillance equipment reliant on street lighting.

## **Night time road accidents**

With regard to the issue of road accidents, the DfT report "Maintenance of Street Lights and Roads (MOSLAR) Guidance Note: Street Lights (2009) concluded that in the past it has been widely assumed that street lighting reduces accidents by 30% but cited more recent research that suggests a more moderate reduction of 10% for dual carriageways and 12.5% for single carriageways. One of the reasons for this is that even though the risk of accidents occurring is higher during the hours of darkness, it is difficult to quantify the direct impact of street lighting separate from other night-time factors such as fatigue and drink driving. Further investigation of each crash is needed to draw conclusions about the impacts of the new street lighting policy on road safety. However, the policy is clear that street lighting will be provided at bends, roundabouts and major junctions as set out on page 4 of this EqIAA.

## **Trip, slip and fall accidents**

With regard to trip, slip and fall accidents, this is potentially proportionately more likely amongst the older population and Disabled People. The policy contains clear exceptions which contribute to the mitigation of these issues and include:-

Where is it deemed to:

- Assist in the mitigation of night-time crime or anti-social behaviour.
- Improve road safety and reduce accidents.
- In areas with CCTV and/or local authority/police surveillance equipment reliant on street lighting.
- Areas with 24hr operational emergency services sites including hospitals.
- Formal pedestrian crossings and controlled junctions (Zebra, pelican etc.).
- Areas with South Gloucestershire Council designated sheltered housing.
- On bends with a radius of less than value below, and/or approach distances to roundabouts and major junctions set out below:

## **EqIAA Outcome**

**The implementation of this policy would result in a potential negative impact for some protected characteristic groups. However, impacts are subject to mitigation measures and monitoring for all of the reasons stated.**

**In addition, opportunities for delivering positive impacts are in place via the proactive approach to identifying need.**

## **ACTIONS TO BE TAKEN AS A RESULT OF THIS EqIAA**

As a result of this EqIAA, the following actions will be taken:

- Implement the exceptions as stated within the policy.
- Monitor the impact on community safety for all protected characteristic groups, both perceived and actual, through on-going dialogue with the Police, Ward Councillors and the local community and by responding to complaints from the public.
- Monitor the impact on road traffic collisions for all protected characteristic groups.
- Implement appropriate actions as a result of on-going monitoring findings.

## FURTHER SOURCES OF RESEARCH

Marchant, P.R. (2011) "Have new street lighting schemes reduced crime in London?" *Radical Statistics*, 104, pp39-48 - [http://www.radstats.org.uk/no104/Marchant2\\_104.pdf](http://www.radstats.org.uk/no104/Marchant2_104.pdf)

Marchant, P.R.(2010) "What is the contribution of street lighting to keeping us safe? An investigation into a policy." *Radical Statistics*, 102, pp32-42 - <http://www.radstats.org.uk/no102/Marchant102.pdf>

Marchant, P.R., (2004) "A demonstration that the claim that brighter lighting reduces crime is unfounded", *British Journal of Criminology*, 44, pp.441-447.

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